



Fig. 1

BREAKDOWN BY SUBJECT (using individuals with complete genotypes)

of subjects containing at least one of the following VLDLr alleles
 frequency (column percentage)

| VLDLr allele# | Cases (N=204) | | | Controls (N=117) | | | Odds Ratio (p-value) | | |
|------------------|---------------|-----------|----------------|------------------|-----------|----------------|----------------------|--------------|-------------|
| | Males (N=148) | | Females (N=56) | Males (N=75) | | Females (N=42) | Total | | Total |
| | | | | | | | | | |
| 5 | 91 (59.5) | 35 (60.3) | 1 (1.7) | 55 (71.4) | 28 (66.7) | 0 (0.0) | 83 (69.7) | 0.59 (0.083) | 0.78 (0.57) |
| 7 | 0 (0.0) | 1 (1.7) | 27 (46.6) | 0 (0.0) | 0 (0.0) | 23 (54.8) | 0 (0.0) | 0.50 (1.00) | 2.22 (1.00) |
| 8 | 74 (48.4) | 29 (50.0) | 0 (0.0) | 31 (40.3) | 15 (35.7) | 1 (2.4) | 54 (45.4) | 1.39 (0.24) | 0.72 (0.55) |
| 9 | 80 (52.3) | 2 (1.3) | 1 (0.7) | 36 (46.8) | 0 (0.0) | 1 (0.8) | 51 (42.9) | 1.25 (0.46) | 1.80 (0.22) |
| 10 | 2 (1.3) | 1 (1.7) | 2 (0.9) | 0 (0.0) | 1 (1.3) | 0 (0.0) | 1 (0.6) | 2.58 (1.00) | 0.24 (0.42) |
| 11 | 1 (0.7) | 2 (0.9) | 2 (0.9) | 1 (1.3) | 0 (0.0) | 0 (0.0) | 1 (0.8) | 0.50 (1.00) | 2.22 (1.00) |

Fig. 2A

BREAKDOWN BY ALLELE (includes partial genotypes)

frequency (column percentage)

| VLDLr allele# | Cases (N=415) | | | Controls (N=236) | | |
|------------------|---------------|-----------------|------------|------------------|----------------|------------|
| | Males (N=301) | Females (N=114) | Total | Males (N=152) | Females (N=84) | Total |
| 5 | 112 (37.2) | 43 (37.7) | 155 (37.3) | 73 (48.0) | 37 (44.0) | 110 (46.6) |
| 7 | 0 (0.0) | 1 (0.9) | 1 (0.2) | 0 (0.0) | 0 (0.0) | 0 (0.0) |
| 8 | 89 (29.6) | 36 (31.6) | 125 (30.1) | 36 (23.7) | 27 (32.1) | 63 (26.7) |
| 9 | 97 (32.2) | 33 (28.9) | 130 (31.3) | 42 (27.6) | 19 (22.6) | 61 (25.8) |
| 10 | 2 (0.7) | 0 (0.0) | 2 (0.5) | 0 (0.0) | 1 (1.2) | 1 (0.4) |
| 11 | 1 (0.3) | 1 (0.9) | 2 (0.5) | 1 (0.7) | 0 (0.0) | 1 (0.4) |

Males (p-value- CLUMP 10000 sims): 0.19

Females (p-value- CLUMP 10000 sims): 0.62

Total (p-value- CLUMP 10000 sims): 0.33

Fig. 2B

BREAKDOWN BY GENOTYPE

frequency (column percentage)

| VLDLr genotype | Cases (N=204) | | | Controls (N=117) | | | Odds Ratio (p-value) | | |
|----------------|---------------|----------------|-----------|------------------|----------------|-----------|----------------------|-------------|--------------|
| | Males (N=148) | Females (N=56) | Total | Males (N=75) | Females (N=42) | Total | Males | Females | Total |
| 5/5 | 21 (14.2) | 8 (14.3) | 29 (14.2) | 18 (24.0) | 9 (21.4) | 27 (23.1) | 0.52 (0.089) | 0.61 (0.42) | 0.55 (0.044) |
| 5/7 | 0 (0.0) | 1 (1.8) | 1 (0.5) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0.51 (1.00) | 2.30 (1.00) | 1.73 (1.00) |
| 5/8 | 33 (22.3) | 10 (17.9) | 43 (21.1) | 16 (21.3) | 13 (31.0) | 29 (24.8) | 1.06 (1.00) | 0.48 (0.15) | 0.81 (0.48) |
| 5/9 | 35 (23.6) | 15 (26.8) | 50 (24.5) | 21 (28.0) | 6 (14.3) | 27 (23.1) | 0.80 (0.52) | 2.20 (0.21) | 1.08 (0.78) |
| 5/10 | 2 (1.4) | 0 (0.0) | 2 (1.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 2.58 (0.58) | 0.75 (1.00) | 2.90 (0.54) |
| 5/11 | 0 (0.0) | 1 (1.8) | 1 (0.5) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0.51 (1.00) | 2.30 (1.00) | 1.73 (1.00) |
| 8/8 | 15 (10.1) | 7 (12.5) | 22 (10.8) | 5 (6.7) | 4 (9.5) | 9 (7.7) | 1.58 (0.47) | 1.36 (0.76) | 1.45 (0.44) |
| 8/9 | 24 (16.2) | 10 (17.9) | 34 (16.7) | 8 (10.7) | 5 (11.9) | 13 (11.1) | 1.62 (0.31) | 1.61 (0.57) | 1.60 (0.19) |
| 8/10 | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 1 (2.4) | 1 (0.9) | 0.51 (1.00) | 0.24 (0.47) | 0.19 (0.36) |
| 8/11 | 1 (0.7) | 0 (0.0) | 1 (0.5) | 1 (1.3) | 0 (0.0) | 1 (0.9) | 0.50 (1.00) | 0.75 (1.00) | 0.57 (1.00) |
| 9/9 | 17 (11.5) | 4 (7.1) | 21 (10.3) | 6 (8.0) | 4 (9.5) | 10 (8.5) | 1.49 (0.48) | 0.73 (0.72) | 1.23 (0.70) |

Males (p-value- CLUMP 10000 sims): 0.47

Females (p-value- CLUMP 10000 sims): 0.44

Total (p-value- CLUMP 10000 sims): 0.38

Fig. 2C

BREAKDOWN BY GENOTYPE (collapsing groups)

frequency (column percentage)

| VLDLr genotype | Cases (N=204) | | | Controls (N=117) | | | Odds Ratio (<i>p-value</i>) | | |
|-------------------|---------------|----------------|-----------|------------------|----------------|-----------|-------------------------------|-------------|--------------|
| | Males (N=148) | Females (N=56) | Total | Males (N=75) | Females (N=42) | Total | Males | Females | Total |
| 5/5 | 21 (14.2) | 8 (14.3) | 29 (14.2) | 18 (24.0) | 9 (21.4) | 27 (23.1) | 0.52 (0.049) | 0.61 (0.42) | 0.55 (0.044) |
| 5/not 5 | 70 (47.3) | 27 (48.2) | 97 (47.5) | 37 (49.3) | 19 (45.2) | 56 (47.9) | 0.92 (0.77) | 1.13 (0.65) | 0.99 (1.000) |
| not 5/not 5 | 57 (38.5) | 21 (37.5) | 78 (38.2) | 20 (26.7) | 14 (33.3) | 34 (29.1) | 1.72 (0.10) | 1.20 (0.83) | 1.51 (0.110) |

Males (p-value- CLUMP 10000 sims): 0.091

Females (p-value- CLUMP 10000 sims): 0.280

Total (p-value- CLUMP 10000 sims): 0.075

Fig. 2D

| VLDLR | TDT | c | Chi-Sq | Y | S-TDT | Var(V) | z' | W | Combined Scores | z' |
|--------|----------|---|--------|----|---------|--------|--------|----|-----------------|--------|
| Allele | b | | | | Mean(A) | | | | Mean(A) | Var(V) |
| 5 | 1 | 5 | 2.667 | 64 | 65.888 | 10.958 | .419* | 65 | 68.888 | 12.458 |
| 8 | 5 | 1 | 2.667 | 55 | 48.3 | 13.043 | 1.717 | 60 | 51.3 | 14.543 |
| 9 | 0 | 0 | N/A | 45 | 50.412 | 11.382 | 1.456* | 45 | 50.412 | 11.382 |
| 7 | 0 | 0 | N/A | 2 | 1.2 | 0.36 | 0.5 | 2 | 1.2 | 0.36 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| allele | p-values | | | | | | | | | |
| 5 | 0.17 | | | | | | | | | |
| 8 | 0.016 | | | | | | | | | |
| 9 | 0.073 | | | | | | | | | |

Fig. 3